

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-17. Cancelled.

Claim 18 (Currently Amended). A method for sterile filling a pre-sterilized container having a filling port with a bulk sterile fluid comprising the steps of:

- a. establishing an active sterile field;
- b. introducing ~~the~~ a filling port of ~~the~~ a pre-sterilized container into the active sterile field;
- c. transferring an aliquot of ~~the~~ a bulk sterile fluid from a supply container to the pre-sterilized container through the filling port while in the active sterile field; and
- d. removing the filling port of the pre-sterilized container from the active sterile field.

Claim 19 (Original). The method of claim 18, further comprising the step of sealing the filling port of the pre-sterilized container after transferring an aliquot of the bulk sterile fluid.

Claim 20 (Original). The method of claim 18, wherein the step of transferring comprises the steps of:

- a. exposing a dispensing end attached to a supply of the bulk sterile fluid into the active sterile field;
- b. breaching the sealed filling port with the dispensing end;
- c. delivering the bulk sterile fluid to the pre-sterilized container; and
- d. sealing the breached filling port.

Claim 21 (Original). The method of claim 18, wherein the steps of introducing, transferring, and removing are automated.

Claim 22 (Original). The method of claim 18, wherein the step of establishing comprises the step of creating an electron beam field with a voltage of less than 300 KeV to produce an active sterile field.

Claim 23 (Original). The method of claim 22, wherein the electron beam field is established within the range of from about 30 to about 300 KeV.

Claim 24 (Original). The method of claim 22, wherein the electron beam field is established within the range of from about 30 to about 100 KeV.

Claim 25 (Original). The method of claim 24, wherein the electron beam field is established at about 60 KeV.

Claim 26 (Original). The method of claim 18, wherein the step of establishing comprises the step of creating a plasma atmosphere to produce an active sterile field.

Claim 27 (Currently Amended). The method of claim 18, wherein the step of establishing comprises the step of using a ~~high-energy~~ pulsed light with a large ultraviolet component to produce an active sterile field.

Claim 28 (Original). The method of claim 18, wherein the step of establishing comprises the step of creating a chemical vapor atmosphere to produce an active sterile field.

Claim 29 (Original). The method of claim 18, further comprising the step of preventing the bulk sterile fluid from being affected by the active sterile field.

Claim 30 (Original). The method of claim 18, further comprising the step of repeating steps (b) through (d) with another pre-sterilized container having a filling port.

Claim 31 (Original). The method of claim 30, further comprising the step of maintaining the active sterile field between consecutive pre-sterilized containers.

Claim 32 (Original). The method of claim 20, further comprising the step or repeating the steps of introducing the filling port, transferring an aliquot, and removing the filling port, using another pre-sterilized container having a filling port.

Claim 33 (Original). The method of claim 32, further comprising the step of maintaining the sterility of the dispensing end between consecutive pre-sterilized containers.

Claims 34-56. Cancelled

Claim 57 (Withdrawn). A sterilization apparatus comprising,
an electron beam tube having a window permitting emergence of an electron beam from
said tube into an ambient gaseous environment while preserving a vacuum
environment in the tube, the electron beam having a trajectory within a plasma
cloud defining a reactive volume stimulated by interaction of the electron beam

with the ambient environment, with a beam energy less than 100kV at the target,
and
a moveable member manipulating objects in a plurality of directions within the reactive
volume wherein the manipulated objects are sterilized.

Claim 58 (Withdrawn). The apparatus of claim 57 wherein a plurality of beam
tubes have electron beams forming a common reactive volume.

Claim 59 (Withdrawn). The apparatus of claim 58 where the beam tubes are
sufficient in number and arrangement to avoid shadows on specific objects placed in the reactive
volume.

Claim 60 (Withdrawn). The apparatus of claim 57 further defined by a housing
containing the ambient environment.

Claim 61 (Withdrawn). The apparatus of claim 60 wherein the housing has ports
for insertion of material to be sterilized.

Claim 62 (Withdrawn). A sterilization apparatus comprising,
a chamber with ports allowing insertion of objects to be sterilized and having a gaseous
environment therein,
a plurality of vacuum tubes fixed relative to the chamber, each emitting an electron beam
along a path into the chamber through a window separating the gaseous
environment of the chamber from the vacuum of the tube, the beam paths from
the tubes within a common plasma cloud stimulated the electron beams
interacting with the gaseous environment within the chamber, defining a volume
associated with the plasma cloud wherein the objects to be sterilized are exposed
to the plasma cloud, and
at least one moveable member manipulating objects in a plurality of directions in the
reactive volume wherein manipulated objects are sterilized.

Claim 63 (Withdrawn). The apparatus of claim 62 wherein the gaseous
environment is an air environment.

Claim 64 (Withdrawn). The apparatus of claim 62 wherein the gaseous
environment is at atmospheric pressure.

Claim 65 (Withdrawn). A sterilization apparatus comprising,

a single electron beam tube having a window permitting emergence of an electron beam from said tube into an ambient gaseous environment while preserving a vacuum environment in the tube, the electron beam having a trajectory within a plasma cloud defining a reactive volume stimulated by interaction of the electron beam with the ambient environment, with a beam energy less than 100kV at the target, and

an automated moveable member for manipulating objects, including objects that differ in variety, size and shape from the objects to which they are joined, in a plurality of directions within the reactive volume wherein the manipulated objects are sterilized by said single electron beam tube.